Review evidence to inform the health benefits package reform in Vietnam

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Background

Health benefits package under the national Social Health Insurance (SHI) program

• Issued in 2009

• More than 20,000 items (Medicines, medical devices and medical supplies) are covered in the current package.

• The Health Insurance Law enacted in 2008, and a roadmap to achieve UHC was developed in 2012, resulting in a plan to introduce ‘Basic Health Service Package (BHSP)’ by 2018.

• Request from Vietnamese Ministry of Health (MOH) to HITAP for technical support on the review of interventions in the benefits package
Selection of priority issues

• Criteria for setting priority issues
  • Highest budget reimbursed from the Vietnam Social Security (VSS)
  • Analysis of claim data from VSS in 2015
  • Priority issues are given to the top 20 medicines and 5 medical services reimbursed at national level (1/3 of total VSS budget spent)
Process

Step 1: Guidelines & Literature Review
Step 2: Matching indications
Step 3: Clinical Expert Review
Step 4: Developing list of indications
Step 1: Guidelines & Literature Review

Evidence on safety, efficacy/effectiveness, and cost-effectiveness

• Guidelines
  • 19th WHO Model List of Essential Medicines, Thailand’s National List of Essential Medicines, and Vietnamese guidelines, and other national guidelines or international professional associations

• Health-related bibliographic databases
  • Medline and Cochrane Library

• HTA database
  • Centre for Reviews and Dissemination (CRD)

• Review protocol
Traffic light system for presenting reviewed evidence

Indications derived from the review of related guidelines and existing systematic reviews

<table>
<thead>
<tr>
<th>Indications</th>
<th>Safety</th>
<th>Clinical effectiveness</th>
<th>Value for money</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indication I</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>Green</td>
</tr>
<tr>
<td>Indication II</td>
<td>✔</td>
<td>✔</td>
<td>unknown</td>
<td>Yellow</td>
</tr>
<tr>
<td>Indication III</td>
<td>✔</td>
<td>✔</td>
<td>✕</td>
<td>Yellow</td>
</tr>
<tr>
<td>Indication IV</td>
<td>✔</td>
<td>Unknown, ✕</td>
<td></td>
<td>Yellow</td>
</tr>
<tr>
<td>Indication V</td>
<td>✕</td>
<td></td>
<td></td>
<td>Red</td>
</tr>
</tbody>
</table>

- ✔ = there is a supportive evidence
- ✕ = there is no supportive evidence
- unknown = no data
- ☒ = not considered due to lack of safety and/or clinical effectiveness

Recommended indications

Not recommended indications

Inappropriate indications

Clinically beneficial but not good value for money

Appropriate indications

Quantify proportion of patients in each category and estimate budget impact
Step 2: Matching indications

• Data from 14 hospitals

• Top ten indications
  • the number of patients who were prescribed any of the selected interventions with known medical indications identified in Step 1.

• The analysis aimed to match indications where the prescription of medicines/medical devices were deemed appropriate by the review.
Antibiotic

<table>
<thead>
<tr>
<th>Indications used in Vietnam</th>
<th>Number of patients</th>
<th>Summary of evidence</th>
<th>Name of supported guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pneumonia</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe pneumonia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilator-associated pneumonia*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nosocomial pneumonia*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Chronic kidney disease</td>
<td>2,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Rheumatic mitral valve diseases</td>
<td>2,350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cerebral infarction</td>
<td>2,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Intracerebral haemorrhage</td>
<td>1,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Heart failure</td>
<td>1,700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Other sepsis</td>
<td>1,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Acute myocardial infarction</td>
<td>1,770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Other COPD</td>
<td>1,590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>3,200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 3: Clinical Expert Review

• Grey zone

• Clinical expert was asked to identify for each of the patient records whether the prescription was justified for the given indication.

• The medical indications not identified in the literature review but recommended by clinical experts.
Step 4: Developing list of indications

- A list of medical indications for given interventions that should be reimbursed under the BHSP based on the evidence available.
- VSS plans to send notice to health facilities on the use with no supporting evidences.
1. Review evidence and match with indications from hospital data

2. Clinical experts consider indications with no evidence and verify review results

3. Clinical experts approval and construction of lists of indications

Indications that are clinically beneficial but not good value for money

Appropriate indications for Vietnam’s Benefits Package

Recommended indications

Not recommended indications

Ineffective Indications

Unsafe Indications

Indications with no evidence

Evidence available

Safety

Clinical Effectiveness

Cost Effectiveness

Approved by experts

Not cost effective Indications

Approved by experts

Approved by experts

Road to identify appropriate indications
Results (1): reviewed indications for esomeprazole

<table>
<thead>
<tr>
<th>Indications</th>
<th>Summary of evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular patients currently receiving antiplatelet therapy</td>
<td></td>
</tr>
<tr>
<td>Erosive oesophagitis</td>
<td></td>
</tr>
<tr>
<td>Gastro-oesophageal reflux disease</td>
<td></td>
</tr>
<tr>
<td>• Initial therapy for GERD patients with continued reflux symptoms and failed the PASS test.</td>
<td></td>
</tr>
<tr>
<td>• Maintenance therapy</td>
<td></td>
</tr>
<tr>
<td>Helicobacter pylori infection</td>
<td></td>
</tr>
</tbody>
</table>
Results (2)

Figure 2: Matching Hospital Data with Review Findings

- **Amino acid**
- **Clifuroxacin**
- **Ipsenem**
- **Zoledronic acid**
- **Meropenem**
- **Albumin**
- **Pacitaxel**
- **Oxaliplatin**
- **Elenotrib**
- **Rituximab**
- **Imatinib**
- **Sorafenib**

**% Patients**

- Other indications not identified in review
- With potential harm
- Without clinical benefit
- Clinical benefit but not good value for money
- Without evidence on value for money
- With evidence of good value for money

Medicines
Results (3)

Figure 3: Results of Expert Review

% Cases

- Albumin
- Ciprofloxacin
- Esomeprazol
- Imipinem
- Meropenem

- Undecided (cases)
- Not have enough evidence to support (cases)
- Reasonable (cases)
Results (4) Potential saving

- **Expenditure in VND Billions**

- **Antibiotic drugs**
  - Albumin
  - Amino acids*
  - Esomeprazole
  - Meropenem
  - Glatatin, Imipenem
  - Ciprofloxacina

- **Cancer drugs**
  - Oxaliplatin
  - Paclitaxel*
  - Rituximab*
  - Erlotinib*
  - Sorafenib
  - Imatinib
  - Zoledronic acid*

*Include indications that were found to be inappropriate or could not be verified as being appropriate.

- **Inappropriate indications**: 51%
- **Appropriate indications**: 22%
- **Clinically beneficial but not good value for money**: 27%
There is a huge opportunity for the Vietnamese government to develop more effective and efficient benefits package, based on stronger scientific evidence, in addition to local inputs by healthcare providers.